

Amendments to the Specifications:

Please make the following amendments to the specification:

Please delete the paragraph at Page 1, Line 6, and insert instead:

- - The invention relates to a flat storage element for an X-ray image ~~according to the preamble of claim 1.~~ - -

Please delete the paragraph at Page 1, Line 26, and insert instead:

- - There is therefore to be created by the present invention a storage element ~~according to the preamble of claim 1~~ which is optically homogeneous, so that no scattering of activating light and measuring light takes place in the storage layer. - -

Please delete the paragraph at Page 1, Line 30, and insert instead:

- - This object is achieved according to the invention by a storage element ~~with the features given in claim 1 for an X-ray image,~~ with a large number of storage particles which may be placed by means of X-ray light in metastable excitation states that are convertible by irradiation with activating light into an unstable excitation state which is in turn decomposed with the radiation of fluorescent light, and with a transparent binding agent by means of which the storage particles are held together to form a storage layer, wherein the binding agent and the storage particles have substantially the same refractive index. - -

Please delete the paragraph at Page 2, Line 21, beginning with "Advantageous developments . . ."

Please delete the paragraph at Page 2, Line 23, and insert instead:

- - If ~~according to claim 2~~ different salts crystallising together are used for the storage particles, the refractive index may be adjusted simply within very wide limits. It is possible by corresponding variation of the ratio in which the two salts are provided to cover a wide range of binding agent refractive indices, to attain exactly the refractive index of a predetermined binding agent. - -

Please delete the paragraph at Page 2, Line 30, and insert instead:

- - A refractive index of preferably between 1.4 and 1.6 is selected for the binding agent according to a preferred embodiment of the invention~~claim 6~~. A large number of different salt compositions is then available with which said range of the refractive index may be realised, so that a selection may be made from said large number in terms of other parameters to be included, e.g. the size of the particular unit cell of the salt which influences the preferred excitation wavelength of the colour centres formed. - -

Please delete the paragraph at Page 3, Line 7, and insert instead:

- - If an isotropic binding agent and isotropic storage particles are used, this ~~The development of the invention according to claim 7~~ also prevents small residual scattering of the light, such as would be caused by an anisotropic material. - -

Please delete the paragraph at Page 3, Line 12, and insert instead:

- - ~~The development of the invention according to claim 8~~ An anti-reflection coating borne by the front side of the storage layer prevents a deterioration in the resolution, such as would be obtained by reflections on the front boundary surface of the storage layer viewed in the direction of motion of the light. - -

Please delete the paragraph at Page 3, Line 19, and insert instead:

- - ~~With the development of the invention according to claim 9~~ an absorbing layer arranged on the rear side of the storage layer, reflections of activating light on the rear side of the storage layer are eliminated. A further improved spatial resolution of the X-ray image read out is thereby obtained. - -

Please delete the paragraph at Page 3, Line 25, and insert instead:

- - With a storage element ~~according to claim 10~~ the rear side of which is provided with a reflecting layer the yield of fluorescent light is improved, since the light radiated into the rear half-space is reflected towards the front side. The sensitivity of the storage film is improved by a factor of 2 in this way. - -

Please delete the paragraph at Page 3, Line 32, and insert instead:

- - ~~The development of the invention according to claim 11~~ A storage element in which a protective layer of material absorbing X-ray beams is arranged behind the storage layer is of advantage in terms of minimising the radiation load on a patient whose teeth are X-rayed with a storage element held

behind the jaw. - -

Please delete the paragraph at Page 4, Line 3, and insert instead:

- - ~~The development of the invention according to claim 12~~ If such protective layer is firmly connected to the storage layer, this is of advantage in terms of a simple handling of the storage element. The whole of the storage element may thus also be bent without fold formation. - -

Please delete the paragraph at Page 4, Line 9, and insert instead:

- - A storage element ~~as given in claim 13~~ forming a bendable layered structure may be adapted effectively to curved surfaces, e.g. the curvature of a jaw. - -

Please delete the paragraph at Page 4, Line 13, and insert instead:

- - If a storage element is produced by preparing a binding agent in the liquid state, dispersing storage particles in the liquid binding, dispersing the material obtained in this way to form a thin film-type layer and then curing the binding agent, this ~~The method given in claim 14~~ ensures that the binding agent also fits exactly positively in microscopic terms around the storage particles. No small air inclusions or cavities therefore arise, which in turn could again represent scatter centres. - -